



# VD

## 铝电解电容器-贴片型

## Aluminum electrolytic capacitor- SMD type

### 特点 Features

- 低阻抗。Low impedance.
- 适用于再流焊。Reflow soldering is available.
- 适用于高密度表面组装。available for high density surface mounting.
- 工作温度范围宽 (-55~+105°C) Operating over wide temperature range.
- RoHS指令已对应完毕。Adapted to the RoHS directive.

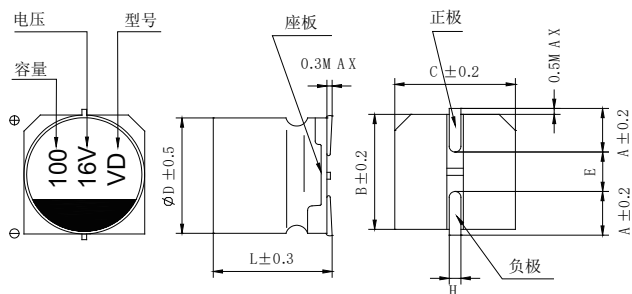


### 主要技术性能 Specifications

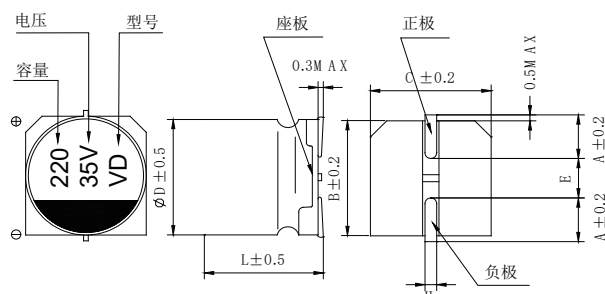
项目 Items	特性 Performance Characteristics									
工作温度范围 Operating Temperature Range	-55~+105°C									
额定电压范围 Rated Voltage Range	6.3~100V									
标称容量范围 Nominal Capacitance Range	4.7~2200μF									
标称容量允许偏差 Capacitance Tolerance	±20% (20°C, 120Hz)									
漏电流 Leakage Current	I ≤ 0.01CRVR or 3(μA), 取较大者 (2分钟) CR: 标称容量 (μF) UR: 额定电压 (V) I ≤ 0.01CRVR or 3(μA) Whichever is greater (at 20°C, after 2 minutes) CR: Nominal Capacitance (μF) UR: Rated voltages (V)									
损耗角正切 (tgδ) Dissipation Factor (Max) 20°C, 120Hz	U <sub>r</sub> (V)	6.3	10	16	25	35	50	63	80	100
	tgδ	0.26	0.20	0.16	0.14	0.12	0.12	0.10	0.08	0.07
耐久性 Load Life	+105°C施加额定电压5000小时后 (φD=4, 5和6.3为3000小时), 电容器应满足以下要求: After 5000 hours (3000 hours for φD = 4, 5 and 6.3) . application of rated voltage at 105°C, the capacitor shall meet the following requirement:									
	电容量变化率 Capacitance Change	±30%初始值以内 Within ±30% of the initial value								
	损耗角正切 Dissipation Factor	≤ 300%初始规定值 Not more than 300% of the initial specified value								
高温贮存 Shelf Life	+105°C 贮存1000小时后, 电容器应满足以上耐久性要求 After storage for 1000 hours at +105°C, the capacitors shall meet the requirement of load life above									
	U <sub>r</sub> (V)	6.3	10	16	25	35	50	63	80	100
低温特性 Low Temperature Stability 阻抗比 Impedance Ratio (120Hz)	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2	2	2
	Z(-55°C)/Z(+20°C)	8	5	4	3	3	3	3	3	3
	在250°C的条件下, 电容器在热板上保持30秒, 然后从热板上取出电容器, 让其在室温下恢复, 电容器应满足以下要求: The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement.									
耐焊接热 Resistance to Soldering Heat	电容量变化率 Capacitance Change	±10%初始值以内 Within ±10% of the initial value								
	损耗角正切 Dissipation Factor	≤ 初始规定值 Not more than the initial specified value								
	漏电流 Leakage Current	≤ 初始规定值 Not more than the initial specified value								

## 外形图及尺寸表 Case Size Table

## Φ4~Φ6.3



## Φ8~Φ12.5



单位 Unit: mm

	4×5.8	5×5.8	6.3×5.8	6.3×7.7	8×10.5	10×10.5	10×12.5	12.5×13.5
A	1.35	2.1	2.4	2.4	2.9	3.2	3.2	4.7
B	4.3	5.3	6.6	6.6	8.3	10.3	10.3	13
C	4.3	5.3	6.6	6.6	8.3	10.3	10.3	13
E	1.0	1.3	2.2	2.2	3.1	4.5	4.5	4.5
L	5.8	5.8	5.8	7.7	10.5	10.5	12.5	13.5
H	0.5~0.8				0.8~1.1			

## 标称容量、额定电压、额定纹波电流与尺寸对应表

## Nominal Capacitance, Rated Voltage, Rated Ripple Current and Case Size Table

电压 WV (Vdc)	容量 Cap (μF)	产品尺寸 Size	纹波电流 mArms 100KHz/105°C	阻抗 Impedance (Ω) 100KHz/25°C	电压 WV (Vdc)	容量 Cap (μF)	产品尺寸 Size	纹波电流 mArms 100KHz/105°C	阻抗 Impedance (Ω) 100KHz/25°C
6.3	22	4×5.8	90	1.35	35	4.7	4×5.8	90	1.35
	47	5×5.8	160	0.70		10	5×5.8	160	0.70
	100	5×5.8	160	0.70		22	6.3×5.8	240	0.36
	220	6.3×5.8	240	0.36		47	6.3×7.7	300	0.28
	330	6.3×7.7	300	0.28		100	8×10.5	650	0.16
	470	8×10.5	650	0.16		220	10×10.5	850	0.09
	1000	10×10.5	850	0.09		330	10×12.5	1000	0.075
	1500	10×12.5	1000	0.075		470	12.5×13.5	1190	0.06
10	22	4×5.8	90	1.35	50	4.7	4×5.8	60	3.0
	47	5×5.8	160	0.70		10	5×5.8	85	1.50
	100	6.3×5.8	240	0.36		22	6.3×5.8	165	0.88
	220	6.3×7.7	300	0.28		33	6.3×7.7	195	0.68
	470	8×10.5	650	0.16		47	8×10.5	350	0.34
	1000	10×10.5	850	0.09		100	10×10.5	670	0.18
	1500	12.5×13.5	1190	0.06		330	12.5×13.5	650	0.12
	16	10	4×5.8	90		1.35	63	10	6.3×5.8
22		5×5.8	160	0.70	22	6.3×7.7		120	1.2
100		6.3×5.8	240	0.36	47	8×10.5		250	0.65
220		6.3×7.7	300	0.28	100	10×10.5		400	0.35
330		8×10.5	650	0.16	220	12×13.5		720	0.15
470		10×10.5	850	0.09	10	6.3×7.7		60	2.4
1000		12.5×13.5	1190	0.06	22	8×10.5		130	1.3
25		10	4×5.8	90	1.35	80		33	10×10.5
	22	5×5.8	160	0.70	47		10×10.5	200	0.7
	47	6.3×5.8	240	0.36	100		12.5×13.5	460	0.45
	100	6.3×7.7	300	0.28	22		8×10.5	130	1.3
	220	8×10.5	650	0.16	33		10×10.5	200	0.7
	470	10×10.5	850	0.09	100		10×12.5	280	0.45
	560	10×12.5	1000	0.075	82		13.5×13.5	460	0.45
	680	12.5×13.5	1190	0.06					

## 额定纹波电流频率修正系数

## Frequency correction factor for ripple current

Frequency 频率	50Hz	120Hz	300Hz	1KHz	≥ 10KHz
Coefficient 系数	0.35	0.50	0.64	0.83	1.00